

CON.
S
43
.E22
no.829

Please
handle this volume
with care.

University of Connecticut
Libraries, Storrs




3 9153 01143703 7

GOVERNMENT PUBLICATIONS
RECEIVED
JAN 10 1986
UNIVERSITY LIBRARY
UNIVERSITY OF CONNECTICUT

CONN
S
43
.E22
no. 829

Inspection of Commercial Fertilizers — 1985

By Lester Hankin



Digitized by the Internet Archive
in 2011 with funding from
LYRASIS members and Sloan Foundation

<http://www.archive.org/details/inspectionsofcom829hank>

INSPECTION OF COMMERCIAL FERTILIZERS--1985

by Lester Hankin

During 1985, 316 official samples of fertilizer were collected by inspectors of the Connecticut Department of Agriculture and examined for authenticity of guaranteed analysis that is stated on the label and compliance with State Regulations. Other fertilizer samples were tested for farmers and Station research but are not included in this Bulletin. Although all guaranteed analyses are examined, only the results for the major plant nutrients of nitrogen, phosphoric acid, and potash are presented in this Bulletin.

Table 1 shows individual samples from 59 manufacturers. The numbers preceding the brand name are the guaranteed analyses. For example, 10-10-10, indicates the guaranteed percentage for nitrogen (N), phosphoric acid (P2O5), and potash (K2O), in that order. The actual content is then shown, with deficiencies indicated by a dash following the amount found. Table 2 summarizes for each manufacturer the number of guarantees examined for each plant nutrient, the percentage of the samples not meeting their guarantee, and the average percentage of guarantee found. Table 3 shows the tonnage of the various grades of mixed fertilizer sold in Connecticut. Only grades prepared by at least three manufacturers are shown; other grades are placed in the miscellaneous category. The tonnage of fertilizer material and mixed fertilizer sold in Connecticut is shown in Table 4.

Two types of variability affect fertilizer analysis and must be considered in judging deficiencies. The first is the variability among different batches of the same grade from a manufacturer. This variability can be noted in Table 1 by examining the analyses of the same grade from the same manufacturer. The second type of variability is between duplicate analyses of the same sample. The variability among duplicate analyses is shown in the statement: the mean difference between duplicates for nitrogen and phosphoric acid is about two-tenths percent and for potash about three-tenths percent.

Fertilizer samples are deemed deficient in any nutrient if the analysis is below the guarantee by more than the values established by the Association of American Feed Control Officials. Overall, 311 guarantees for nitrogen were made and 7.7% were deficient, 300 guarantees for phosphoric acid and 8.7% were deficient, and 299 guarantees for potash and 13.7% were deficient. In 1985 the percentages of deficiencies for nitrogen and phosphoric acid are lower than in 1984. For potash, the percentage of deficiencies is higher in 1985 than in 1984.

Analyses were performed by H. Kocaba, M. Pyles, M.A. Illig, E. Hickson, and J. Smart. Samples were collected by J. Chapman, J. Dippel, D. Nisely, and A. VanDyke under the direction of K. Veit. Fertilizer laws are administered by the Commissioner of Agriculture.

Lester Hankin
Chief, Analytical Chemistry

Table 1. Analysis of Individual Samples of Commercial Fertilizers.

Manufacturer, guarantee and brand				Nutrients found, %			Manufacturer, guarantee and brand				Nutrients found, %		
				N	P205	K20				N	P205	K20	
<u>A.H. Hoffman, Inc.</u>				6.5	9.7	7.3	<u>Atlas Fish Fert.</u>				5.6	1.7	2.0
05	09	06	Hoffman Rose Food				05	01	01	Atlas Fish Emulsion Plant Food	5.3	1.5	1.8
<u>Agino, Inc.</u>				37.7			05	01	01	Atlas Fish Emulsion Plant Food	5.4	1.5	2.0
37			Sulfur Coated Urea										
<u>Agri-Turf, Inc.</u>				26.3	7.9	8.7-	<u>Burnishine Products, Inc.</u>				2.5	1.9	1.0
25	05	10	Agri-Turf				03	02	01	Burnishine Terranium Plantfood			
<u>Agrico Chemical Corp.</u>				24.8		25.1-	<u>Cadwell & Jones</u>				5.2	6.8-	5.5
15	30		Agrico Fertilizer				05	10	05	Surge Lawn & Garden	5.7	7.1-	4.1-
<u>Agway, Inc.</u>				17.4		38.7	05	10	10	Specialty Fertilizer	5.6	12.1	10.5
12	39		Agway Blend	4.0			05	10	10	Surge Veg. & Flower	5.9	12.7	10.3
04	12	04	Agway Bulb Bloomer	9.1			10	06	04	Hi-Organic Fert	13.0	6.3	4.1
07	16	32	Agway Blend	13.2	6.4	5.6	10	06	04	C & J Hi-Organic	6.3-	4.9-	3.3-
10	06	04	Agway Turf Food Special	10.2	17.0	11.6	10	06	04	Surge Lawn & Garden	10.8	6.1	4.7
10	10	10	Agway Nutri-Bond	10.5	17.0	13.4-	10	06	10	Specialty Fertilizer	16.6	8.4	5.4-
10	15	15	Agway Nutri-Bond Taterbest	10.6	23.8	8.6-	10	10	10	Specialty Fertilizer	11.3	10.4	10.1
10	20	10	Agway Corn Starter Nutri-Bond	14.7	16.8	14.7	18	02	04	Cadwell & Jones + Iron W/Dursban	21.5	1.6	3.1-
15	15	15	Agway Nutri Bond	23.5	20.4	16.1-	20	10	10	Super Surge Lawn Food 50% Org N	21.2	10.1	10.9
16	32	16	Agway Start & Gro 100% Water Sol	13.4-	33.1	14.3-	20	10	10	Super Surge Lawn Food	22.8	11.2	9.9
18	18	18	Agway Blend	23.5	20.4	16.1-	20	10	10	Super Surge Lawn Food	22.7	12.2	11.7
18	18	18	Agway Blend	18.9	14.7	25.5	21	07	07	Specialty Fertilizer	22.0	5.3-	6.1-
20	14	21	Agway Blend	20.3	12.6-	32.4	23	06	09	Surge	28.7	5.4	6.0-
20	20	20	Agway Sol-U-Green	13.1-	21.6	22.2	23	06	09	Surge Lawn & Garden	26.3	6.4	9.3
21	10	21	Agway Blend	20.5	16.0	34.5	32			C & J Specialty SCU	32.4		
21	10	21	Agway Blend	22.7	13.1	23.3	33	10	10	Surge Turf Products	36.8	9.9	15.9
22	06	08	Agway Greenlawn Fert	23.6	7.5	4.9-	4.59	5.62	6.20	C & J Specialty	5.1	4.4	6.4
22	06	08	Agway Greenlawn Fert	23.4	6.7	7.1-	4.59	5.62	6.20	C & J Specialty	5.2	5.8	6.1
22	12	18	Agway Blend	23.1	11.6	19.3	4.59	6.94	5.22	C & J Specialty	4.2	7.2	5.4
22	13	18	Agway Blend	22.6	10.5-	27.9	4.59	8.20	3.98	C & J Specialty	5.1	7.2-	3.7
22	13	18	Agway Blend	21.3	10.3-	25.7	4.65	5.69	5.29	C & J Specialty	4.7	5.9	5.5
22	14	18	Agway Blend	22.0	13.3	18.9	4.65	5.69	5.29	C & J Specialty	4.8	4.8-	4.8
22	14	18	Agway Blend	22.8	12.8-	21.5	4.68	7.07	4.14	C & J Specialty	5.2	6.4	4.2
23	12	18	Agway Blend	23.2	18.7	22.6	4.68	7.07	4.14	C & J Specialty	4.9	7.1	4.2
23	13	17	Agway Blend	23.5	17.8	15.1-	4.73	5.8	4.19	C & J Specialty	5.3	4.7-	4.6
24	05	22	Agway Blend	23.2	6.3	31.0	4.73	5.80	4.19	C & J Specialty	4.8	6.7	4.7
25	05	20	Agway Blend	20.3-	5.4	30.7	4.73	7.16	3.19	C & J Specialty	4.0-	5.6-	3.1
27	11	14	Agway Blend	24.5-	14.6	18.5	4.8	5.88	3.24	C & J Specialty	4.80	5.5	3.0
27	23		Agway Blend	26.8	26.5		4.80	5.88	3.24	C & J Specialty	4.4	6.2	3.5
							7.2	7.2	7.14	C & J Specialty	5.7-	6.7	6.7
<u>Allied Corp.</u>							<u>Carefree Garden Prod.</u>						
21			Sulf-N45	21.8			07	40	06	Mag Amp Indoor/Outdoor Plant Food	7.2	46.0	6.8
<u>Andraon Peat</u>				1.5	1.0	1.0	<u>Charles C. Hart Seed Co.</u>						
01	01	01	Composted Cow Manure				10	06	04	Hart's Turf Food 50% Org Lawn Fd	11.5	7.2	4.1
<u>Andersons Lawn Fertilizer Div.</u>				30.9	3.9	15.2	20	12	08	Hart's Pro Turf Food	25.4	15.1	8.4
28	04	12	Hart's Premium Lawn Fert				<u>Chevron Chem. Co.</u>						
							03	10	03	Ortho Vitamin B-1 Plant Starter	2.5	11.0	3.3

Manufacturer, guarantee and brand			Nutrients found, %			Manufacturer, guarantee and brand			Nutrients found, %		
			N	P205	K20				N	P205	K20
Giba-Geigy Corp.	05 01	Ortho Fish Emulsion Fert	5.6	1.4	1.8	Espoma Co.	22 08	24	23.0	8.8	15.7-
	05 10	Ortho Houseplant Food	5.3	9.6	5.6		46		46.1		
	05 10	Ortho Houseplant Food	5.5	10.6	5.1						
	05 10	Ortho Vegetable Garden Food	6.0	10.6	8.6-						
	05 15	Ortho Up-Start Root Stimulator	5.4	15.2	5.5		04	02	5.37	5.7	3.2
	05 15	Ortho Up-Start	5.0	14.7	5.0		04	06	4.6	9.2	3.7
	06 09	Ortho Liq Afr Violet Food	6.4	9.4	5.1		07 10	10	5.3	10.7	13.3
	06 18	Ortho Tomato & Vegetable Food	6.7	17.8	6.5		04 07	10	5.5	12.6	7.7-
	08 12	Ortho Rose & Flower Food	8.7	11.9	4.7		06 02	01	6.1	2.5	1.8
	10 08	Ortho Fern & Ivy Food	11.3	8.4	7.9	Estech, Inc.					
	10 08	Ortho Fern & Ivy Food	12.0	8.3	7.6		05	10	7.4	10.1	10.7
	10 08	Ortho Evergreen & Azalea Food	11.1	7.1-	8.9		05	10	6.6	15.1	6.3
	10 10	Ortho Gen Purp Plant Food	15.0	10.5	13.7		05	10	5.5	13.9	6.6
	12 06	Ortho Ortho-Gro Liquid Plnt Food	13.1	5.3	6.1		05	10	5.7	21.9	5.9
	14 07	Ortho Evergreen, Tree & Shrub Fd	14.8	9.0	9.0		05	10	13.9	20.3	8.1
Clinton Nursery Prod.	20 20	Spectrum Earth Care	15.4-	19.6	20.1		05 10	10	14.4	27.2	9.9
	04 10	New Era Flowering Plant	4.9	9.0-	12.5		06 08	06	7.7	8.0	5.6
	05 01	New Era Fish Emulsion	5.8	1.8	1.4		06 10	04	9.5	11.9	7.3
	05 12	New Era Flowering Plant	5.5	13.0	10.2		10 06	04	12.9	6.5	5.4
Crop Production Services	06 12	New Era Solid Plant Food	7.8	12.9	8.9	Faessy & Besthoff, Inc.	10 06	04	15.2	12.6	5.3
	07 15	New Era Plant Food	6.5	16.8	10.0		10 06	04	18.1	13.0	4.1
	08 08	New Era Plant Food	8.5	7.4	9.6		15 15	15	19.4	13.6	14.4
	11 15	New Era Plant Food Tablets	11.1	15.2	21.7		24 02	09	17.5	19.7	12.1-
	12 06	New Era Solid Plant Food	14.7	0.3-	15.3		26 03	10	33.6	2.4	10.1
	05 10	Agrico-Village Green	5.1	9.2-	4.7		27 03	05	34.2	3.1	11.8
	05 10	Agrico Village Green 50% Org N	4.8	9.5	5.1		03 05	03	32.0	4.6	3.6-
	05 10	Agrico Village Green	10.1	17.3	5.1		08 08	08	28.2	3.1	1.7-
	05 10	Agrico Fertilizer	9.0	13.9	11.4		32 03	08	34.4	4.2	4.4-
	05 10	Agrico	8.2	22.2	14.5						
	06 03	Agrico Tobacco	6.2	3.4	3.8-	Fer-Mel Corp.	20	10	17.8-	14.9	8.8-
	08 08	Agrico Fertilizer	9.5	5.8-	5.1-		25	05	37.5	6.8	
	10 06	Agrico Village Green	17.9	12.6	3.6						
	10 06	Agrico Village Green	8.6-	16.0	6.6						
Grip Production Services	10 06	Agrico-Village Green 50% Org N	11.2	7.7	3.6	Green Changer Fert. Co.	12 04	08	8.3-	4.9	14.1
	10 10	Agrico	11.7	8.6-	9.4						
	10 10	Agrico Village Green Specialty	13.2	17.8	11.0						
	10 10	Agrico	12.6	13.6	12.8						
	10 20	Agrico Fertilizer	18.4	29.3	10.3-	Holland Bulb Products	09 09	06	12.4	13.4	6.2
	14 41	Agrico	15.4	20.0	42.0		09 09	06	15.1	13.9	4.4-
	15 10	Agrico Fertilizer	16.0	12.0	7.4-						
	15 10.7	Agrico	14.3	11.6	12.3						
	15 15	Agrico	17.3	15.1	15.1	Hy-Trous/Flash Sales, Inc.	04 12	04	4.4	11.3	5.5
	15 15	Agrico	19.5	22.1	15.0		05 05	01	5.0	5.3	1.4
	19 19	Agrico	20.1	20.7	17.5-		05 05	01	5.9	5.5	1.4
	19 19	Agrico Fertilizer	19.0	20.0	11.7-		05 10	05	4.4-	11.0	5.8

Manufacturer, guarantee and brand			Nutrients found, %			Manufacturer, guarantee and brand			Nutrients found, %		
			N	P205	K20				N	P205	K20
Hyponex Corp.	05 10 05	Hy-Trous Liquid Fert	4.7	10.0	5.6	18	04	10 Lebanon Country Club	18.7	4.2	9.6
	05 10 05	Hy-Trous Liquid Fert	5.2	10.0	5.1	20	08	Greens Keeper w/50% Org Nit	20.1	8.0	8.8
	05 10 05	Hy-Trous Liquid Fert	5.1	10.2	4.7	24	04	Green Pro Crabgrass Prev/Grass Fd 31.2	4.1	3.5	3.5
	05 10 05	Hy-Trous Liquid Fert	5.1	10.2	4.7	24	04	Green Pro Crabgrass Prev/Grass Fd 34.8	3.4	2.4	2.4
	05 10 05	Hy-Trous Liquid Fert	5.1	10.2	4.7	30	03	Green Pro Weed Cont + Grass Food 31.8	4.4	2.1	2.1
Hyponex Corp.	05 10 05	Hyponex Houseplant Food All Purp	4.6	10.8	6.0	30	03	Green Pro Weed Cont + Grass Food 33.5	2.7	2.5	2.5
	07 06 19	Hyponex Houseplant Food All Purp	7.1	7.1	20.2	30	04	Green Power	33.3	3.7	4.3
	07 06 19	Hyponex Houseplant Food All Purp	7.9	7.1	21.4	32	04	Green Pro Grass Food	32.4	4.4	4.8
	07 06 19	Hyponex Plant Food	7.6	7.1	21.9	32	04	Green Pro Grass Food	32.9	3.8	4.4
	08 04 02	Hyponex All Org Fish Pl Fd Stks	9.9	7.2	3.0						
Hyponex Corp.	10 05 05	Hyponex Hypo-styx Foliage Pl Fd	12.0	5.9	6.1	Leeming Div./Pfizer Inc.					
	10 05 05	Hyponex Bug Dart plus Plsnt Food	13.1	6.2	6.3	01	02	01 House in Bloom Flowering Plant Fd	1.0	2.3	1.1
International Minerals & Chem. Co.						Lesco, Inc.					
11	52	MAP	11.6	52.8		18	05	09 Lesco Prof Turf Fert W/Lescosan	17.6	6.4	9.3
International Spike						Lofts, Inc.					
05	15	15 Jobe's Fert. Spikes - Fruit Trees	13.7	13.4	15.7	05	09	06 Lofts Flower Food	8.6	8.9	5.6
08	24	08 Jobe's Fert Spikes/Tom/Gard Veg	12.9	26.5	10.3	05	10	10 Lofts Tomato & Veg Food	7.9	5.5	6.2
12	06	08 Jobe's Fert Spikes/Eygr Trees	16.4	8.3	12.9	05	10	10 Lofts Tomato & Vegetable Food	12.7	9.5	2.9
12	16	12 Jobe's Fertilizer Spikes - Roses	15.8	16.5	14.5	07	09	07 Lofts Broadleaf & Vegetable Food	10.8	19.7	3.7
13	04	05 Jobe's Plant Fd Spks/House Plnts	13.6	5.3	6.8	Marcon Distributing Co., Inc.					
13	04	05 Jobe's Plant Food Spikes	13.0	5.4	6.1	15	30	15 Marcon's Plant Food	9.6	28.8	16.3
13	04	05 Jobe's Plant Food Spikes	13.2	4.9	6.8	Milwaukee Metropolitan Sewerage District					
13	05	07 Jobe's Fert Spikes/Flow/Shrubs	18.7	5.7	8.8	06	02	Milorganite Active Sewage Sludge	6.2	2.2	
15	05	05 Jobe's Spikes for Young Trees	17.1	5.6	9.5	Nitrochem, Inc.					
16	01	06 Jobe's Plnt Fd Spks/Fetns/Palms	17.0	2.3	7.3	34		Bull's Eye Ammonium Nitrate	34.8		
16	08	08 Jobe's Fert. Spikes - Trees	23.3	9.4	8.9	Nor-Am Chemical Co.					
20	20	20 Jobe's Plnt Fd/Indoor-Outdoor	18.1	20.2	22.3	38		Nitroform Blue Chip	37.0		
J. T. Baker Chemical Co.						O. M. Scott & Sons Co.					
09	09	06 One-A-Bulb Prem Fert Tabs	10.0	9.5	14.1	15	20	15 Burpee Grow Tomatoes	17.3	20.7	14.6
Kalium Chemical						18	04	07 Burpee Grow Azal/Camellia/Rhod	19.3	5.1	7.4
Koos, Inc.	05 10 05	62 Muriate of Potash	63.1			18	12	14 Burpee Grow Flowers	18.0	11.9	13.7
	05 10 05	Nature's Best Garden Fert	6.6	11.8	14.1	18	12	14 Burpee Grow Flowers	19.5	11.8	13.0
Lebanon Chem. Corp.	05 10 04	Lebanon Veg Gard Food	3.5	12.6	5.5	18	24	06 Burpee Grow Transplants	19.4	26.6	5.2
	05 10 05	Country Squire Lawn & Garden	5.0	8.5	4.6	18	24	06 Burpee Grow Vegetables	19.8	25.0	5.0
	07 02 03	Agrinite 100% Orgsnic	9.3	3.1		18	24	06 Scott's Starter Fert	20.3	24.4	5.7
	09 05 03	Acres	14.0	5.7	5.1	20	04	08 Burpee Grow Vegetables	19.0	25.1	6.1
	09 05 03	Lebanon Azal, Evergreen & Rhod	9.9	5.7	4.4	26	03	03 Scott's Turf Bldr/Weed Cont/Ln Fd	23.7	4.5	6.6
Lebanon Chem. Corp.	09 19 09	Greenview Tomato-Mate	11.1	24.0	12.9	27	03	03 Scott's Turf Builder	28.7	3.3	4.0
	10 06 04	Country Squire Lawn & Garden	11.4	5.8	4.6	Old Fox Chemical, Inc.					
	10 06 04	Lebanon Grass Food	10.4	6.6	4.1	05	06	07 Old Fox Custom Mix	4.7	11.1	9.4
	10 10 10	Lebanon	10.2	12.3	10.3	05	10	05 Old Fox Garden Food	5.5	11.4	8.6
	13 25 12	Green Pro Fall Grass Food	13.4	25.1	12.1	05	10	05 Old Fox	5.5	12.9	7.0
13	25	12 Green Pro Fall Grass Food	13.3	24.6	13.6						

Manufacturer, guarantee and brand			Nutrients found, %			Manufacturer, guarantee and brand			Nutrients found, %					
			N	P205	K20		N	P205	K20		N	P205	K20	
05	10	05 Old Fox Garden Food	5.1	8.9-	11.7	Ross Daniels, Inc.	9.9	18.8	18.7	16	Ross Gro-Stks/Frt-Orn Tree/Shrbs	10.7	18.5	18.9
05	10	10 Old Fox	7.4	24.2	15.3	08 16	10.7	18.5	18.9	16	Ross Gro-Stakes	10.1	51.0	17.6
06	10	06 Old Fox Shrub & Tree Food	14.1	12.1	17.6	08 16	11.2	10.2	15.5	15	Ross Gro For Young Trees	11.4	11.7	12.3
06	10	06 Old Fox Shrub & Tree Food	11.2	10.2	15.5	08 16	11.2	10.2	15.5	10	Ross Gro-Stakes Evergreens	11.2	11.8	10.4
10	06	04 Old Fox Turf Grass 50% Org N	11.2	7.8	18.4	09 46	11.3	8.9	7.7	10	Ross Gro-Stakes for Evergreens	12.4	12.1	12.3
10	06	04 Old Fox Turf Food 50% Org N	15.3	8.9	7.7	10 10	10.8	24.2	15.3	10	Ross Gro-Stks Evgr/Azal/Gam/Rhod	17.8	4.6	14.6
10	08	10 Old Fox for Tobacco	11.3	10.3	9.4	10 10	12.0	21.6	20.2	09	Ross Gro-Stakes Trees & Shrubs	17.2	10.4	8.8
10	10	10 Old Fox	10.8	24.2	15.3	10 10	12.1	2.2	10.7	10	Schultz Co.	10.5	14.1-	10.9
10	10	10 Old Fox	12.4	12.5	6.6-	10 10	13.7-	9.3	12.5	15	Schultz Instant Liq Plant Food	17.0	7.6	13.4
10	20	10 Old Fox	9.6	14.1-	10.9	16 10	16.7-	6.3-	45.5	12	Osmocote Controlled Release	17.0	7.6	13.4
10	20	20 Old Fox	12.0	21.6	20.2	16 10	18.1	13.9	17.2	12	Osmocote Controlled Release	17.0	7.6	13.4
12	02	08 Old Fox	12.1	2.2	10.7	20.1	20.1	8.1	9.9	44	Sudbury Potash	18.6	13.9	18.8
15	15	15 Old Fox	15.8	12.6-	16.0	19.4-	19.4-	9.0	30.7	44	Sudbury Phosphorus	56.5		48.4
16	09	10 Old Fox	13.7-	9.3	12.5	5.2	5.2	7.0	6.4	44	Sudbury Nitrogen	48.4		
18	07	29 Old Fox Blend	16.7-	6.3-	45.5	4.5	4.5	7.9	7.0	46	Vistron	46.1		
18	11	17 Old Fox	18.1	13.9	17.2	5.4	5.4	4.1-	5.4					
20	04	08 Old Fox Green Gro 40% Org N	20.1	8.1	9.9	5.0	5.0	6.5	6.7					
24	04	24 Old Fox Blend	19.4-	9.0	30.7	4.8	4.8	7.1	5.8					
4.59	5.62	6.20 Old Fox Custom	5.2	7.0	6.4	5.1	5.1	5.4	5.4	15	Miracle Gro Plant Food	16.1	33.8	16.6
4.64	4.41	6.27 Old Fox Custom	4.5	7.9	7.0	5.4	5.4	5.4	5.4	15	Miracle Gro Plant Food	17.0	30.0	15.4
4.65	5.69	5.29 Old Fox Custom	5.4	4.1-	5.4	5.1	5.1	5.4	5.4	21	Miracle Gro Tomatoes	10.8-	19.6	21.1
4.70	4.47	5.36 Old Fox Custom	5.0	6.5	6.7	6.7	6.7	8.9	4.0	10	Miracle Soil Acidifier & P1 Fd	33.2	10.3	10.9
4.73	5.80	4.19 Old Fox Custom	4.8	7.1	5.8	5.1	5.1	5.1	5.2					
4.76	3.27	5.42 Old Fox Custom	5.1	5.4	5.4	6.3-	6.3-	6.8	8.9					
4.88	2.38	4.32 Old Fox Custom	6.7	8.9	4.0									
4.95	3.39	3.33 Old Fox Custom	5.1	5.1	5.2									
7.2	7.2	7.14 Old Fox Custom	6.3-	6.8	8.9									
Parrot Agro Industries, Inc.														
15	30	15 Power-Gro Power Conc & Vit Nutr	15.7	31.6	13.8-									
20	20	20 Parrots Professional Formula	20.5	20.7	20.4									
30	10	10 Power-Gro Acidifier & Plant Food	30.2	9.4	10.4									
Plant Research Lab														
01	02	01 Oxygen Plus Plant Food	1.3	2.4	1.4									
01	02	01 Oxygen Plus Plant Food Vit Nutr	1.2	2.1	1.2									
01	04	02 Oxygen Plus Flowering Houseplant	1.5	4.2	2.1									
04	04	04 Oxygen Plus Outdoor Cont Pl Fd	4.3	3.7	5.7									
1.3	2.5	1.2 Oxygen Plus Indoor Plant Food	1.4	2.6	1.4									
Plantabbs Corp.														
08	06	12 Plantabbs Terranium Plant Food	18.4	6.5	13.7									

Manufacturer, guarantee and brand			Nutrients found, %		
			N	P2O5	K2O
10	30	20 Peters Prof Sol P1 Fd/Bloss Boost	11.1	31.5	22.5
12	36	14 Peters Spec Sol P1 Fd/Afr Violet	12.3	40.5	13.2
15	30	15 Peters Prof Sol P1 Fd/Houseplant	15.6	30.4	16.7
15	30	15 Peters Pro Sol P1 Fd/Houseplant	15.4	30.1	17.7
15	30	15 Peters Houseplant Food	10.0-	29.9	17.9
17	06	06 Peters Pro Sol P1 Fd/Acid Grn	16.9	6.2	7.8
18	18	18 Peters Prof Sol Plant Food	17.4	19.2	19.4
20	20	20 Peters Prof Gen Purp	12.3-	17.1-	22.8
21	07	07 Peters Spec Sol P1 Fd/Acid Spec	21.7	8.7	8.5
30	10	10 Peters Professional Orchid	30.1	12.4	13.0
30	10	10 Peters Prof Sol Plant Food	21.8-	12.0	12.9
<u>Waterlizer Div. of American Aqua-Tec.</u>					
35	05	10 Waterlizer Lawn Food	35.7	5.5	11.6
<u>Megro Div. of Old Ford Industries, Inc.</u>					
07	08	05 XXX Rose Maker	8.6	10.8	5.1
<u>WGM/Hydro</u>					
15.5		Vikingship Brand	14.8		
<u>Woolfolk Chemical Works, Inc.</u>					
14	14	14 Osmorote Foliage and Pot P1 Fd	14.2	14.3	15.1

Table 2. Summary for Each Manufacturer of Number of Claims for Individual Plant Nutrients, Percentage of Claims Not Meeting Guarantee, and Average Percentage of Guarantee for Each Nutrient.

Company	Number Samples	Number of Claims			% Not Meeting Claim			Average % of Claim		
		N	P2O5	K2O	N	P2O5	K2O	N	P2O5	K2O
A.H. Hoffman	1	1	1	1	0	0	0	130	108	122
Agino	1	1	0	0	0	—	—	102	—	—
Agri-Turf	1	1	1	1	0	0	100	105	158	87
Agrico	1	0	1	1	—	0	100	—	165	84
Agway	28	27	28	27	15	14	30	102	115	117
Allied	1	1	0	0	0	—	—	104	—	—
Anderson Peat	1	1	1	1	0	0	0	150	100	100
Andersons	1	1	1	1	0	0	0	110	98	127
Atlas Fish Fert.	3	3	3	3	0	0	0	109	157	193
Burnishine	1	1	1	1	0	0	0	83	95	100
Cadwell & Jones	33	33	32	32	9	28	19	108	97	99
Carefree	1	1	1	1	0	0	0	103	115	113
Charles C. Hart	2	2	2	2	0	0	0	121	123	104
Chevron	16	16	16	16	0	6	6	111	105	115
Ciba-Geigy	1	1	1	1	100	0	0	87	98	101
Clinton Nursery	8	8	8	8	0	25	0	113	100	142
Crop Production	23	23	21	22	4	14	32	125	136	97
Espoma	5	5	5	5	0	0	20	124	160	129
Estech	18	18	18	18	0	0	22	149	152	119
Faesy & Besthoff	3	3	1	1	0	0	0	104	280	180
Fer-Mel	2	2	1	2	50	0	50	120	136	119
Green Charger	1	1	1	1	100	0	0	69	123	176
Holland Bulb	2	2	2	2	0	0	50	153	152	88
Hy-Trous/Flash	7	7	7	7	14	0	0	102	103	126
Hyponex	7	7	7	7	0	0	0	113	126	122
International Minerals	1	1	1	0	0	0	—	106	102	—
International Spike	12	12	12	12	8	8	0	134	126	131
J. T. Baker	1	1	1	1	0	0	0	111	106	235
Kalium	1	0	0	1	—	—	0	—	—	102
Koos	1	1	1	1	0	0	0	132	118	282
Lebanon	20	20	20	19	5	0	15	112	115	109
Leeming/Pfizer	1	1	1	1	0	0	0	100	115	110
Lesco	1	1	1	1	0	0	0	98	128	103
Lofts	4	4	4	4	0	25	75	184	117	60
Marcon	1	1	1	1	100	0	0	64	96	109
Milwaukee	1	1	1	0	0	0	—	103	110	—
Nitrochem	1	1	0	0	0	—	—	102	—	—
Nor-Am	1	1	0	0	0	—	—	97	—	—
O. M. Scott	11	11	11	11	0	0	27	109	106	98
Old Fox	30	30	30	30	13	17	3	115	143	147
Parrot Agro	3	3	3	3	0	0	33	103	101	99
Plant Research	5	5	5	5	0	0	0	123	105	125
Plantabbs	1	1	1	1	0	0	0	230	108	114
Rapid-Gro	5	5	5	5	20	0	0	85	103	110
Robert N. McClellan	1	1	1	1	100	0	100	50	110	55
Ross Daniels	9	9	9	9	0	0	0	116	116	120
Schultz	1	1	1	1	0	100	0	105	94	109
Sierra	1	1	1	1	0	0	0	94	127	112
Sohio	1	1	0	0	0	—	—	100	—	—
Sterns Nurseries	4	4	4	4	25	0	0	98	106	106
Sudbury Lab	3	1	1	1	0	0	0	110	128	110
Unique Fertilizer	1	1	1	1	0	0	0	116	174	118
Universal	1	1	1	1	0	100	0	114	84	103
Valagra	9	9	8	8	11	13	63	115	114	83
W. R. Grace	12	12	12	12	25	8	0	94	106	115
Waterlizer/Amer. Aqua	1	1	1	1	0	0	0	102	110	116
Wegro/Old Ford	1	1	1	1	0	0	0	123	135	102
WGM/Hydro	1	1	0	0	0	—	—	96	—	—
Woolfolk	1	1	1	1	0	0	0	101	102	108

Table 3. Distribution of Mixed Fertilizer Sold in Connecticut July 1, 1984-June 30, 1985

Grade	Tons
05-10-05	1102
05-10-10	1015
10-05-05	38
10-06-04	2203
10-10-10	5735
10-20-10	591
15-08-12	702
15-10-05	2
15-10-10	1626
15-15-15	887
15-20-25	6
15-30-15	107
18-04-10	24
19-19-19	283
20-00-10	33
20-03-03	34
20-04-08	116
20-05-10	446
20-10-10	598
20-20-20	65
24-12-18	241
25-03-03	161
25-05-10	152
27-03-03	895
30-00-00	143
30-10-10	44
32-00-00	18
38-00-00	76
TOTAL	17343
MISCELLANEOUS	19737
GRAND TOTAL	37080

Table 4. Tonnage of Fertilizer Material and Mixed Fertilizers Sold in Connecticut July 1, 1984-June 30, 1985

COMMODITY	TONS
MULTINUTRIENT	
Ammoniated phosphate	1399
TOTAL	1399
CHEMICAL NITROGEN	
Ammonium nitrate	125
Ammonium sulfate	52
Calcium nitrate	116
Nitrate of soda	6
Nitrogen solutions	1788
Other nitrogen materials	3
Urea	781
Ureaform	4
TOTAL	2875
PHOSPHATES	
Bone meal, raw	30
Bone meal, steamed	78
Phosphate rock	5
Superphosphate 18%	1
Superphosphate 20%	21
Superphosphate 40%	420
Superphosphate 46%	264
Other phosphate materials	16
TOTAL	835
POTASH	
Muriate of potash 60%	4031
Potassium carbonate	7
Potassium nitrate	43
Sulfate of potash	6
Sulfate of potash/magnesium	105
TOTAL	4192
NATURAL ORGANICS	
Caster pomace	75
Cottonseed meal	83
Dried blood	5
Dried manure- cattle	3620
Gelatin	8
Greensand	2
Manure, composted	1689
Other organics	1
TOTAL	5483
SECONDARY AND MICRONUTRIENTS	
Aluminum sulfate	2
Borax	1
Copper sulfate	17
Land plaster(gypsum)	39
Iron	2
Magnesium oxide	1
Sulfur	2
Zinc	1
Miscellaneous	1
TOTAL	66
TOTAL-COMMODITIES	14850
TOTAL-COMMERCIAL FERTILIZERS	37080
GRAND TOTAL	51930



University of
Connecticut
Libraries



39153028938613

